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ABSTRACT

An electro-optical method and apparatus for evaluating the dimensions of any protrusion from the threshold of the fabric surface is achieved by bending any length of fabric over a rotating roller so that the contoured area of the protrusion body above the surface can be visualized. The image of the contour as seen by a digital camera is processed statistically and then by a neural network to yield an integrated picture of the fabric protrusions. The grading results of pilling are well correlated to the visual method of pilling evaluation.